|   | Index of Claims                          |          |          |          |                 |          |          |          |          |          |          |          |            | Application No. |                        |           |               |          |            |           |       |       | Applicant(s)  |             |           |          |          |          |          |          |          |           |   |  |
|---|--|----------|----------|----------|-----------------|----------|----------|----------|----------|----------|----------|----------|------------|-----------------|------------------------|-----------|---------------|----------|------------|-----------|-------|-------|---------------|-------------|-----------|----------|----------|----------|----------|----------|----------|-----------|---|--|
| 1 (4 8 (4 ) (4 1) 4 4 (14 4 (14) 4 (14) 4 (14) 4 (14) 4 (14) 4 (14) |  |          |          |          |                 |          |          |          |          |          |          |          | 1          | 10/657,311      |                        |           |               |          |            |           |       |       | HALLER ET AL. |             |           |          |          |          |          |          |          |           |   |  |
|   |  |          |          |          |                 |          |          |          |          |          |          |          |            | E               | Examiner Theresa Trieu |           |               |          |            |           |       |       |               | Art Unit    |           |          |          |          |          |          |          |           |   |  |
|   | 1 10 10 10 10 10 10 10 10 10 10 10 10 10 |          |          |          |                 |          |          |          |          |          |          |          |            |                 |                        |           |               |          |            |           |       |       |               |             |           |          |          |          |          |          | 7        |           |   |  |
|   | <u> </u>                                 |          |          |          |                 |          |          |          |          |          |          |          |            |                 |                        |           |               |          |            |           |       |       | $\overline{}$ | <del></del> |           |          |          |          |          |          |          |           |   |  |
| √ Rejected – (Through numer<br>Cancelled                            |  |          |          |          |                 |          |          |          |          |          | ral      | )        |            | N               | Non-Elected            |           |               |          | Α          | Appeal    |       |       |               |             |           |          |          |          |          |          |          |           |   |  |
|   |  |          |          |          |                 |          |          |          | ł        | $\dashv$ |          |          |            |                 |                        |           | ŀ             | +        |            |           |       |       |               | -           |           |          |          |          |          |          |          |           |   |  |
|   |  |          | =        | Allowed  |                 |          |          |          |          | ÷        |          | R        | Restricted |                 |                        |           |               | 1        | Interferer |           | ∍n    | ICO   |               | 0           |           | Objected |          |          |          |          |          | •         |   |  |
| ſ   | Cla                                      | aim      | Γ        |          |                 |          |          | e        |          |          | Claim    |          |            |                 |                        | Date      |               |          |            | Cla       | Claim |       | Da            |             |           | ate      | ite      |          |          |          |          |           |   |  |
|   |  | al       | 4        | 4        |                 |          |          |          |          |          |          |          | a          |                 | T                      |           |               |          |            |           |       |       | ä             |             |           |          |          |          |          |          |          |           |   |  |
|   | Final                                    | Original | 8/18/04  | 12/8/0   |                 |          |          | ·        |          |          |          | Final    | Original   |                 |                        |           |               |          |            |           |       | Final | Original      |             |           |          |          | ļ        |          |          |          |           |   |  |
| ŀ   |  | A        | 1        |          |                 | +        |          | $\dashv$ | _        | +        | -        | -        | 51         | +               | +                      | $\forall$ | $\dashv$      | $\dashv$ | -          | +-        | ŀ     |       | 101           | $\vdash$    | $\dashv$  |          | 1        | +        | $\dashv$ | $\dashv$ |          | _         |   |  |
|   |  | 2        | 1        | =        |                 |          |          |          |          |          |          |          | 52         |                 |                        |           |               |          |            |           |       |       | 102           |             |           |          |          |          |          |          |          |           |   |  |
| ļ   |  | 3        | 1        | =        |                 | _        | _        | _        | _        |          | _        | <u> </u> | 53         |                 | $\perp$                | Ш         | _             | _        |            | 11        |       |       | 103           |             | $\dashv$  | _        | 4        | 4        | _        | 4        | 4        | _         |   |  |
|   |  | 4        | 0        |          |                 | $\dashv$ | _        | $\dashv$ | $\dashv$ | _        | - :::    | <u> </u> | 54         | $\perp$         | +                      | $\vdash$  | $\dashv$      | _        | +          | $\square$ | ŀ     |       | 104           |             |           |          | -        | -+       | $\dashv$ | $\dashv$ | +        | 4         |   |  |
|   |  | 5<br>6   | 00       | = =      |                 | -        | $\dashv$ | $\dashv$ | $\dashv$ | +        | -        | <u> </u> | 55<br>56   | _               | +                      | Н         | $\dashv$      | $\dashv$ | $\dashv$   |           | -     |       | 105<br>106    | -           | $\dashv$  | -+       | +        | $\dashv$ | $\dashv$ | +        | +        | $\dashv$  |   |  |
| F   |  | 7        | 7        | =        |                 | $\dashv$ | $\dashv$ | $\dashv$ | ┥        | +        | -        | }—       | 57         | +               | +                      | +         | $\dashv$      | $\dashv$ |            | +         | ŀ     |       | 107           |             | -         |          | -        | $\dashv$ | $\dashv$ | $\dashv$ | +        | $\dashv$  |   |  |
| F   |  | 8        | =        | =        |                 | -        | _        | $\dashv$ | $\dashv$ | $\dashv$ |          | ╟        | 58         | +               | $\top$                 | $\dagger$ | $\dashv$      | $\dashv$ | $\dashv$   | H         | ı     |       | 108           |             | -         | $\dashv$ | -        | _        | 1        | 1        | +        | ⊣         |   |  |
| ļ   |  | 9        | =        | =        |                 |          |          |          |          | $\neg$   |          |          | 59         |                 | 1                      | $\top$    |               | 一        |            |           | ľ     |       | 109           |             |           |          |          |          |          |          |          |           | • |  |
|   |  | 10       | =        | =        |                 |          |          |          |          |          |          |          | 60         |                 |                        |           |               |          |            | $\square$ |       |       | 110           |             |           | $\Box$   |          |          |          | $\Box$   |          |           |   |  |
| . [   |  | 11       | =        | =        |                 | $\perp$  |          | _        | _        | Ц.       | _        | <u> </u> | 61         |                 | _ _                    | 4         | _             | _        | _          | Ш         |       |       | 111           |             |           | _        | _        | _        | _        | _        | $\dashv$ |           |   |  |
| -   |  | 12       | =        |          | _               | $\dashv$ | -        | -        | $\dashv$ |          | -        |          | 62         | -               | +-                     | +         | $\dashv$      | -        |            | +         | -     |       | 112<br>113    | $\vdash$    |           | $\dashv$ | $\dashv$ | $\dashv$ | -        | -        |          |           |   |  |
| -   |  | 13<br>14 | =        | =        | -               |          |          | $\dashv$ | $\dashv$ | +        | -        | -        | 63<br>64   | +               | +                      | +         | $\vdash$      | -        | +          | +-1       | ŀ     |       | 114           | Н           | -         | $\dashv$ | $\dashv$ | $\dashv$ | -        | $\dashv$ | +        | -         |   |  |
| ŀ   |  | 15       | -        | Ö        |                 |          |          | $\dashv$ | $\dashv$ | +        | -        |          | 65         |                 | +                      | +         | $\vdash$      | -        |            | 1-1       | ŀ     |       | 115           | Н           | _         | $\dashv$ | $\dashv$ | $\dashv$ | _        | _        | 十        | ┪         |   |  |
|   |  | 16       |          | 1        |                 |          |          | 十        |          | $\dashv$ |          |          | 66         |                 | 1                      |           |               |          | $\neg$     | $\Box$    |       | 0     | 116           | П           | $\exists$ | 十        | 7        | $\neg$   | $\neg$   |          | $\dashv$ | ╗         |   |  |
|   |  | 17       |          | Ó        |                 |          |          |          |          |          |          |          | 67         |                 |                        |           |               |          |            |           |       |       | 117           |             |           |          |          |          |          |          |          |           |   |  |
|   |  | 18       |          |          |                 |          |          |          |          |          |          |          | 68         |                 | $\perp$                | $\perp$   |               |          |            | Щ         |       |       | 118           | Ш           |           | _        | _        | _        | _        | _        | $\perp$  | 4         |   |  |
| -   |  | ·19      | _        |          |                 | _        | _        | 4        | _        |          | -        |          | 69         | -               | +                      | +         | $\dashv$      | -        | _          | 1         | -     |       | 119           |             | -         | -        | -        |          | _        | +        | +        | 4         |   |  |
| ŀ   |  | 20<br>21 |          |          | $\dashv$        | $\dashv$ | {        | $\dashv$ | $\dashv$ |          |          | -        | 70<br>71   | -               | ╁                      | ╁┼        | -             | -        |            | +         | -     |       | 120<br>121    |             |           | -        | $\dashv$ | $\dashv$ | $\dashv$ | +        | $\dashv$ | $\dashv$  |   |  |
|   |  | 22       |          | $\vdash$ | $\dashv$        | ᅱ        | $\dashv$ | $\dashv$ |          |          | -        | -        | 72         |                 | ╁                      | +         | -             |          |            | +-        | ŀ     |       | 122           | -           |           | -+       | $\dashv$ | $\dashv$ | _        | $\dashv$ | $\dashv$ | $\dashv$  |   |  |
| ļ   |  | 23       |          | T        | $\neg$          | 一        | $\neg$   | _        |          | $\dashv$ |          |          | 73         |                 | $\top$                 | $\top$    |               | 寸        | $\dashv$   | 1         |       |       | 123           | П           | 寸         | 寸        | $\dashv$ |          |          | 寸        | $\top$   | $\neg$    |   |  |
|   |  | 24       |          |          |                 |          |          |          |          |          |          |          | 74         |                 |                        |           |               |          |            |           |       |       | 124           |             |           |          |          |          |          |          |          |           |   |  |
|   |  | 25       |          |          |                 |          |          |          |          |          |          |          | 75         |                 |                        |           |               |          |            |           |       |       | 125           |             |           |          |          |          |          |          | $\perp$  | _         |   |  |
| ]   |  | 26       |          |          |                 |          | _        | $\perp$  | _        |          | _ ::::   | <u></u>  | 76         |                 | 4_                     | 4         | $\perp$       | _        |            | 1         |       |       | 126           |             | _         | _        | 4        | _        | $\dashv$ | 4        | 4        | _         |   |  |
| . }   |  | 27       |          |          |                 |          |          | $\dashv$ | -        |          |          |          | 77         |                 | +                      | -         | _             | -        | _          |           | -     |       | 127           | $\vdash$    | $\dashv$  | -        |          | $\dashv$ | $\dashv$ | +        | +        | $\dashv$  | • |  |
| -   |  | 28<br>29 | -        |          |                 |          |          | $\dashv$ |          |          |          | -        | 78<br>79   | $\vdash$        | +                      | +         | $\dashv$      | $\dashv$ | +          | ++        | 1     |       | 128<br>129    | -           | $\dashv$  | $\dashv$ | $\dashv$ | -        | $\dashv$ | $\dashv$ | $\dashv$ | ᅱ         |   |  |
| }   |  | 30       | H        |          |                 | _        | -        | +        |          |          | -        | $\vdash$ | 80         |                 | ╁                      | +         | $\dashv$      |          | -          | 1         | ŀ     |       | 130           | Н           | ᅥ         | 十        | 一        | +        | _        | $\dashv$ | -        | $\dashv$  |   |  |
|   |  | 31       |          |          | $\Box$          | 寸        |          |          |          | $\top$   |          |          | 81         |                 | $\top$                 | $\top$    |               |          |            |           | i     |       | 131           |             | 寸         | $\neg$   | $\neg$   |          | _        |          | _        | ┪         |   |  |
|   |  | 32       |          |          |                 |          |          |          |          |          |          |          | 82         |                 |                        |           | $\overline{}$ |          |            |           |       |       | 132           |             |           |          |          |          |          |          |          |           |   |  |
|   |  | 33       |          |          |                 |          |          | $\Box$   |          |          |          |          | 83         |                 |                        |           |               |          |            |           |       |       | 133           |             |           |          |          |          | _        |          |          |           |   |  |
|   |  | 34       | _        |          |                 | _        | _        | _        |          | 4        | _        |          | 84         |                 | _                      |           |               | _        |            | Ш         |       |       | 134           |             | _         | _        | _        | _        | _        | _        | $\dashv$ | 4         |   |  |
| -   |  | 35       |          |          | _               |          | _        | -        |          | -        | _        |          | 85         | _               | - -                    | 4-        | -             | -        |            |           | -     |       | 135           | $\vdash$    |           | -        |          |          | -        | $\dashv$ | $\dashv$ | $\dashv$  |   |  |
| }   |  | 36<br>37 | -        |          | $\dashv$        | $\dashv$ | -        | $\dashv$ | -        | -        |          | -        | 86<br>87   | +               | +                      | +         | $\dashv$      | +        | +          | +-        | -     |       | 136<br>137    |             |           |          | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  |   |  |
| ł   |  | 38       | Н        |          |                 | -        | $\dashv$ | +        |          | +        | $\dashv$ | -        | 88         | -               | +                      | +         | $\dashv$      | $\dashv$ | +          | +         | -     |       | 138           |             | $\dashv$  | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  |   |  |
| ŀ   |  | 39       | -        |          | $\neg$          |          |          | $\dashv$ |          | $\dashv$ |          | -        | 89         |                 | +                      | +         |               | _        |            |           |       |       | 139           |             | 一         | 寸        | $\dashv$ | $\dashv$ | 一        | $\dashv$ |          | 7         |   |  |
|   |  | 40       |          |          |                 |          |          |          |          |          |          |          | 90         |                 |                        |           |               |          |            |           |       |       | 140           |             |           |          |          |          |          |          |          |           |   |  |
|   |  | 41       |          |          |                 |          |          |          |          |          |          |          | 91         |                 | $\perp$                |           |               |          |            |           |       |       | 141           |             |           |          |          |          | [        |          |          |           |   |  |
| 1   |  | 42       | L        |          | $\sqcup$        | 4        | $\dashv$ | $\dashv$ |          | $\perp$  | -        | <u> </u> | 92         | $\perp$         | +                      | $\vdash$  | $\dashv$      | $\dashv$ | +          | +         | -     |       | 142           |             | $\dashv$  | $\dashv$ | 4        | $\dashv$ | _        | 4        | 4        | $\dashv$  |   |  |
|   |  | 43       |          | -        | -               | -        | 4        |          | -        | $\dashv$ | -        |          | 93         |                 | +-                     | -         |               | 4        |            | +         | -     |       | 143<br>144    | $\vdash$    |           |          | -        | $\dashv$ | -        | -        | $\dashv$ | $\dashv$  |   |  |
| }   |  | 44       | $\vdash$ | $\vdash$ | $\vdash \vdash$ | $\dashv$ | $\dashv$ | -        | $\dashv$ | +        | -        | $\vdash$ | 95         | +               | +                      | +         | $\dashv$      | $\dashv$ | -          | +         | 1     |       | 144           | $\vdash$    | $\dashv$  | +        | $\dashv$ | $\dashv$ | $\dashv$ | +        | +        | $\dashv$  |   |  |
| ŀ   |  | 46       |          | $\vdash$ | $\vdash$        | $\dashv$ | $\dashv$ | $\vdash$ |          | +        | -        | -        | 96         |                 | +-                     | +         | $\vdash$      | $\dashv$ | +          | +         | ŀ     |       | 146           | ╁╾┪         | $\dashv$  |          | +        | -        |          | +        | $\dashv$ | $\dashv$  |   |  |
| ŀ   |  | 47       |          | H        | $\vdash$        | $\dashv$ | $\dashv$ |          |          | $\dashv$ | -        | -        | 97         | +               | +                      | $\top$    | $\Box$        | $\dashv$ | _          | 1-1       | 1     |       | 147           | $\vdash$    |           | $\dashv$ | 1        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  |   |  |
| ļ   |  | 48       |          |          |                 | _        |          |          |          |          |          |          | 98         |                 | 丁                      | $\top$    |               |          |            |           |       |       | 148           | $\Box$      |           |          |          |          | _        | $\top$   | _        | $\exists$ |   |  |
|   |  | 49       |          |          |                 |          |          |          |          |          |          |          | 99         |                 |                        |           |               |          |            |           |       |       | 149           |             |           |          |          |          |          |          |          |           |   |  |
| [   |  | 50       |          |          |                 |          |          |          |          |          | _]:.:    |          | 100        |                 | $\perp$                |           | $\Box$        |          |            |           |       |       | 150           |             | $\Box$    | $\Box$   | $\Box$   | $\Box$   |          |          | T        |           |   |  |

Application No.

Applicant(s)